CDX-5040/5042

SERVICE MANUAL

E Model
CDX-5040

AEP Model
CDX-5042

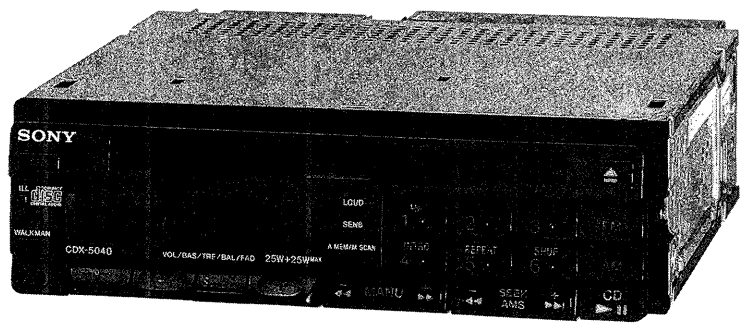


Photo: CDX-5040

Model Name Using Similar Mechanism	CDX-7540
CD Drive Mechanism Type	MG-200Z-33

SPECIFICATIONS

Power amplifier section

Outputs: Speaker outputs (sure seal connectors)
Speaker impedance: 4 – 8 ohms
Maximum power output:
25 W × 2 (at 4 ohms)*
9 W × 4 (at 4 ohms)*
* Measured at 14.4 V

CD player section

System: Compact disc digital audio system
Frequency response: 10 – 20,000 Hz ±3 dB
Signal-to-noise ratio: 90 dB
Wow and flutter: Below measurable limit

General

Input: WALKMAN IN jack
Power requirements: 12 V DC car battery (negative ground)
Current drain: 800 mA (during CD playback)
2 A (during disc loading or eject)
Operating temperature: – 10°C to 50°C
Dimensions: Approx. 180 × 50 × 163 mm (w/h/d)
Weight: Approx. 1.8 kg
Tone controls: Bass ±10 dB (100 Hz)
Treble ±10 dB (10 kHz)
Supplied accessories:
Mounting hardware (1 set)
Connecting cord (1)
Rubber cap for the WALKMAN IN jack (1)
Optional accessories:
Mounting kit
Cleaning cloth XP-CD1

Tuner section

	FM	AM
Tuning range	87.5 – 108.0 MHz	531 – 1,602 kHz
Antenna terminal	FM/AM external antenna connector	
Intermediate frequency	10.7 MHz	450 kHz
Usable sensitivity	12 dBf (1.1 μV/75 ohms)	35 μV
Selectivity	75 dB at ±400 kHz	—
Signal-to-noise ratio	70 dB (monaural) 65 dB (stereo)	55 dB
Harmonic distortion at 1 kHz	0.3% (monaural) 0.5% (stereo)	0.3%
Stereo separation	35 dB	—
Frequency response	30 Hz – 15,000 Hz ±3 dB	

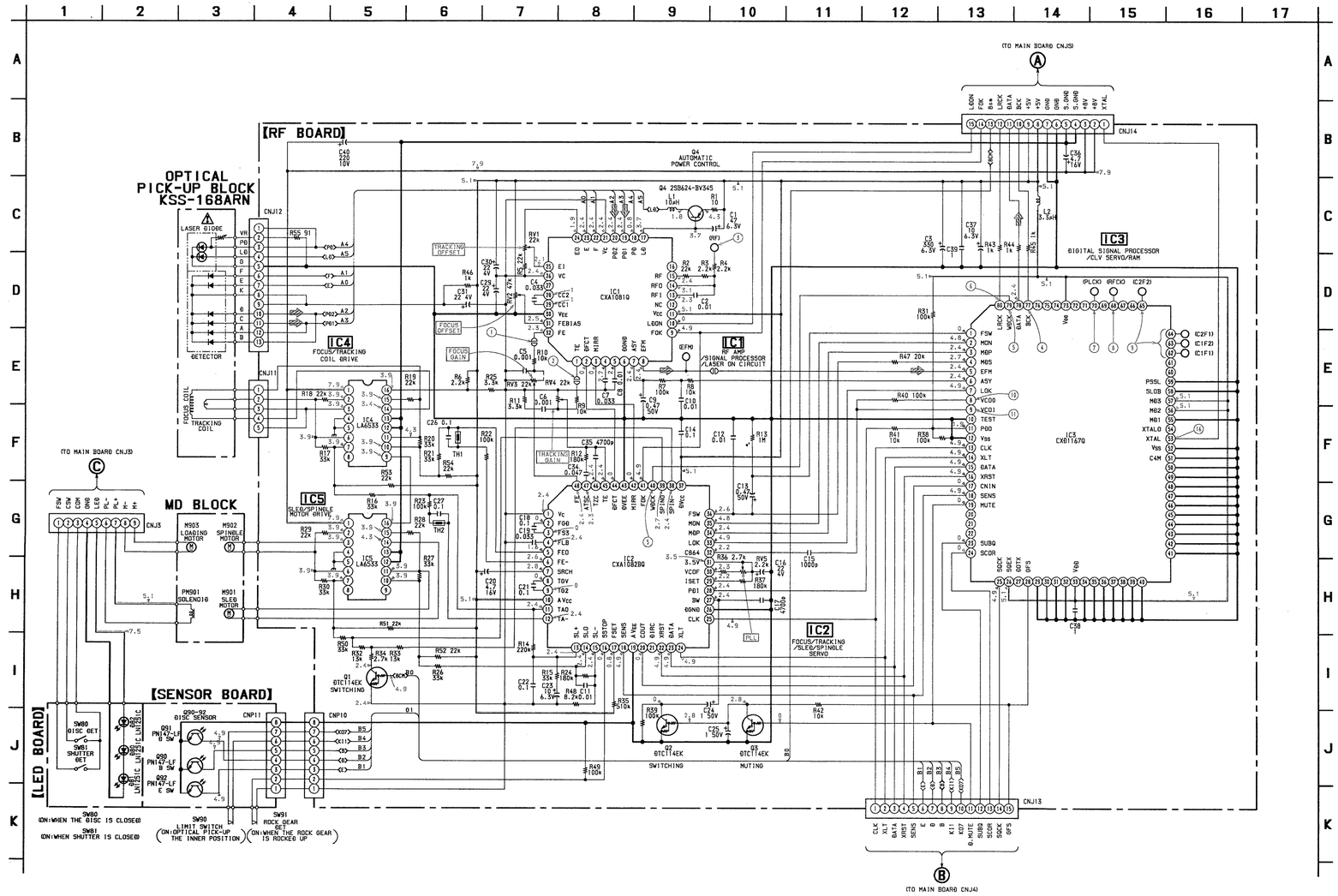
Design and specifications subject to change without notice.

FM/AM COMPACT DISC PLAYER

SONY®

5-4. SCHEMATIC DIAGRAM (MD Section)

- See page 29 for IC BLOCK DIAGRAMS.
- See page 32 for WAVEFORMS.



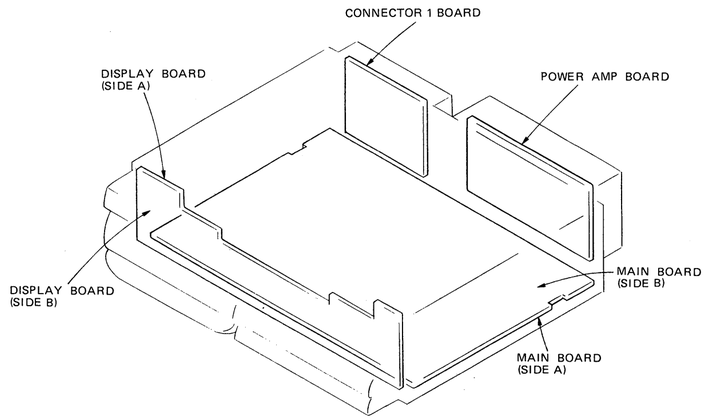
Note: (Main SECTION)

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/10W or less unless otherwise specified.
- △ : internal component.
- ——— : B+ lines.
- Power voltage is dc 14.4V dc and fed with regulated dc power supply from external power voltage jack.
- Voltage and waveforms are dc with respect to ground under no signal conditions.
  no mark : FM
  ( ) : CD PLAY
  《 》: AM
- Voltages are taken with a VOM. (input impedance 10 MΩ) Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ⇛ : CD
  ⇛ : AUX

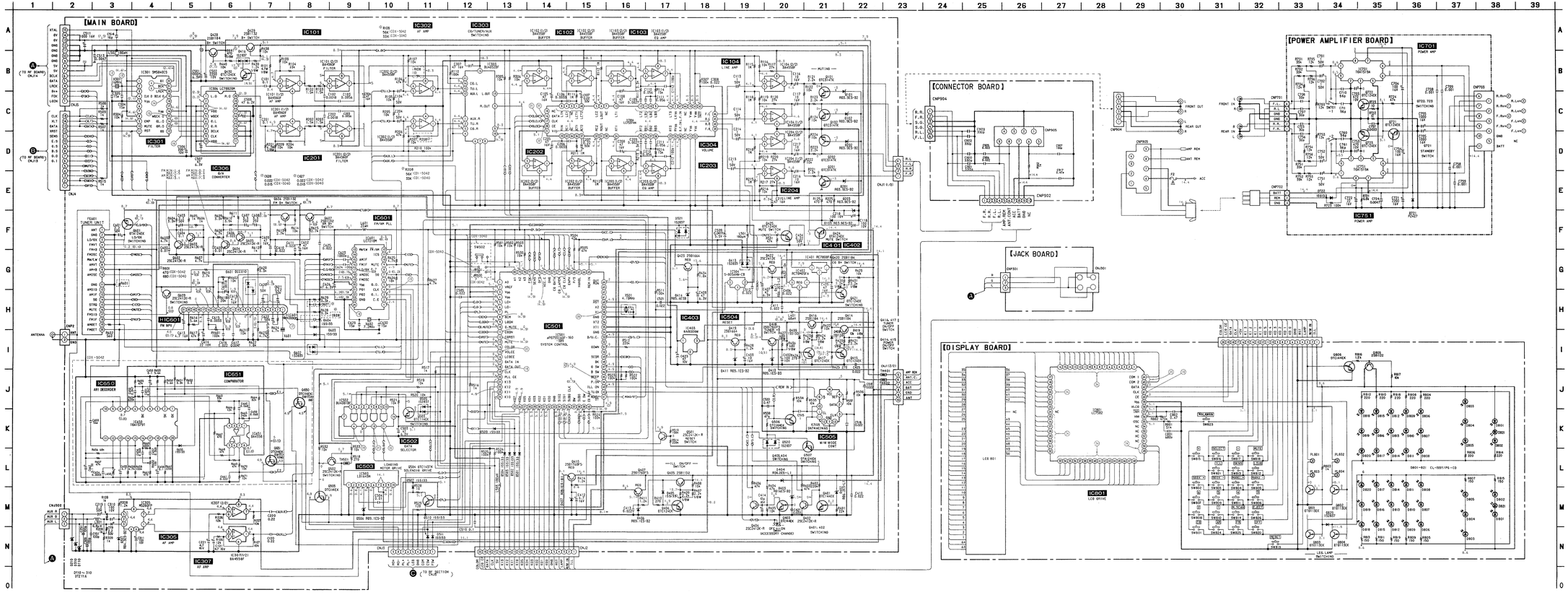
Note: (MD SECTION)

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/10W or less unless otherwise specified.
- ——— : B+ lines.
- Power voltage is dc 14.4V dc and fed with regulated dc power supply from battery, accessory terminals..
- Voltage and waveforms are dc with respect to ground under no signal conditions.
  no mark : CD PLAY
- Circled numbers refer to waveforms.
- Signal path.
  ⇛ : CD

5-5. CIRCUIT BOARDS LOCATION



5-7. SCHEMATIC DIAGRAM (MAIN Section) • See page 21 for note. • See page 29 for IC BLOCK DIAGRAMS. • See page 32 for WAVEFORMS.



5-9. WAVEFORMS

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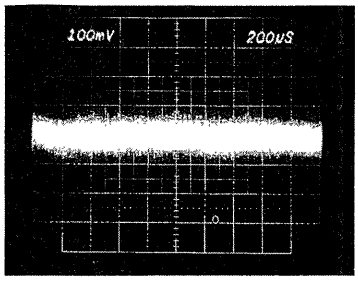

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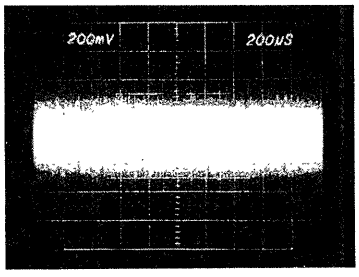

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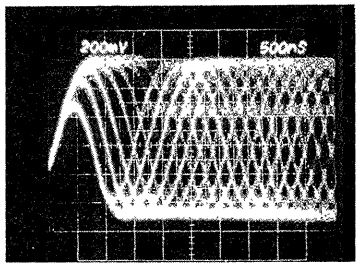

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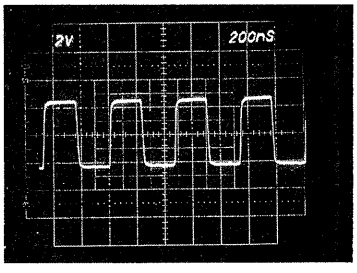

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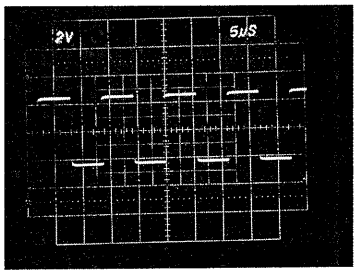

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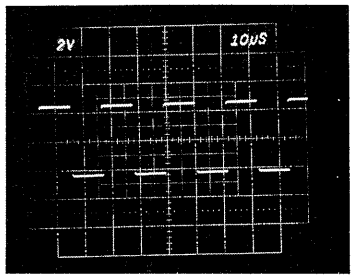

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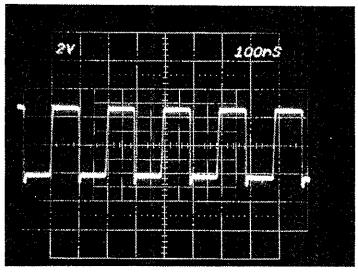

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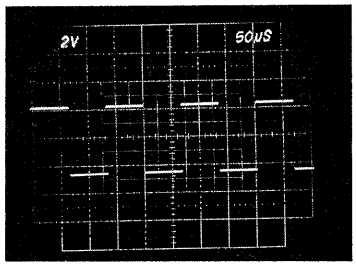

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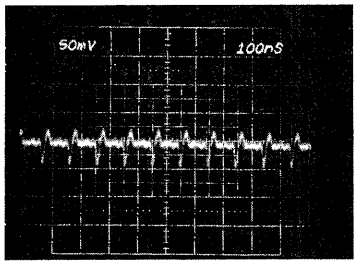

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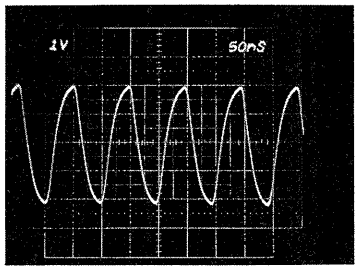

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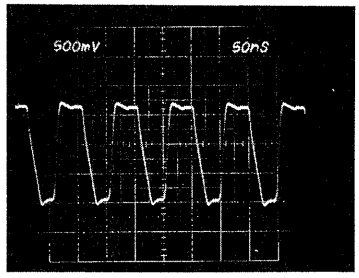

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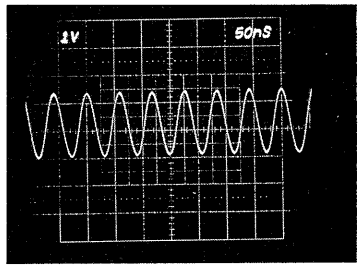

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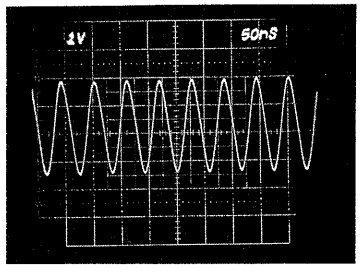

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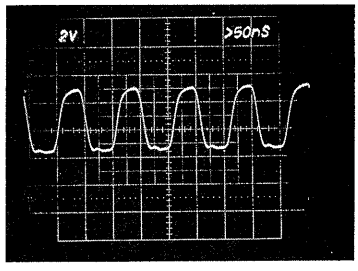

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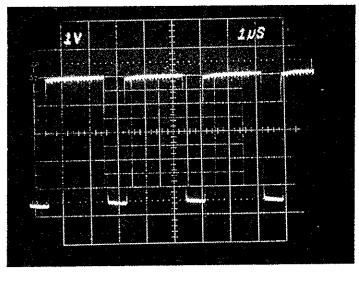

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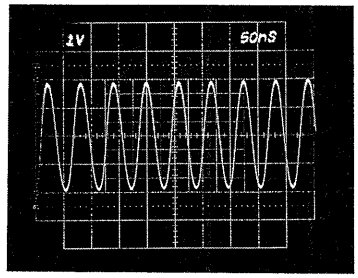
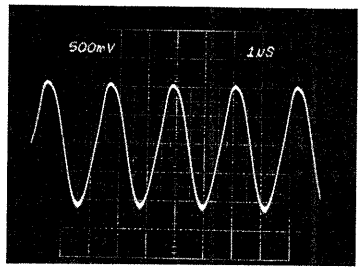
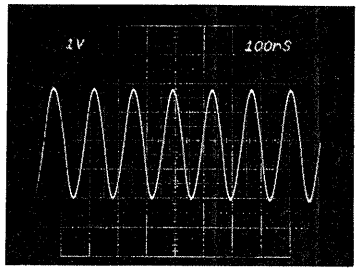

1V
50nS

⑰


500mV
1uS

⑱


1V
100nS

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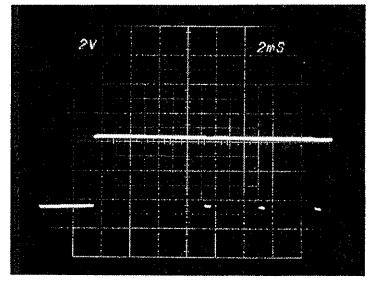
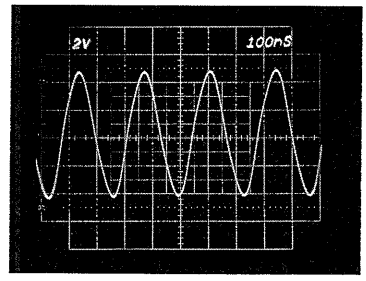
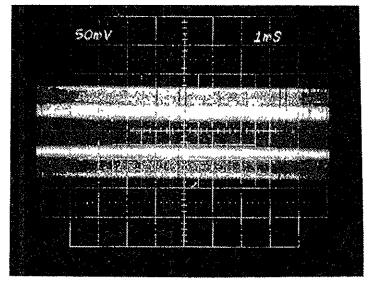

2V
2mS

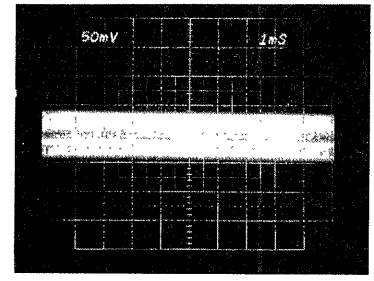
⑳


2V
100nS

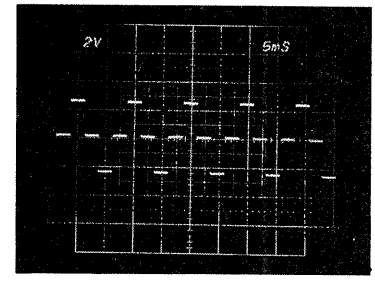
㉑


50mV
1mS

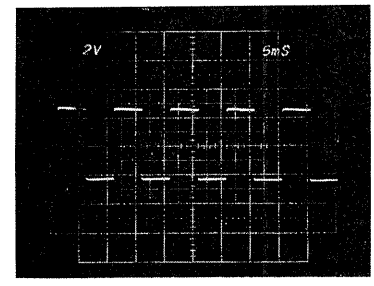
㉒


50mV
1mS

㉓


2V
5mS

㉔


2V
5mS